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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,653	08/26/2005	Klaus Dieter Liedtke	0745/73621/NHZ	7422

7590 10/16/2007  
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New York, NY 10036

EXAMINER
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LENNOX, NATALIE

ART UNIT	PAPER NUMBER
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2626

MAIL DATE	DELIVERY MODE
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10/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/519,653

Applicant(s)

LIEDTKE ET AL.

Examiner

Natalie Lennox

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on December 23, 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the disclosure uses the drawings to better explain the invention, however there is only a "Key to figures" filed which does not help to visually understand what applicant is describing in the specification relating to the drawings and examples presented in the same. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett (US Patent 7,050,977) in view of Young et al. (US Patent 7,120,582).

As per claim 1, Bennett teaches a method for natural voice recognition based on a generative transformation/phrase structure grammar, comprising the following steps:

- syntactically reconstructing the spoken phrase from the recognized words using a grammar (Col. 34, lines 34-51, grammar 602G from Fig. 4A and Col. 27, lines 34-41), characterized in that the syntactic reconstruction of the spoken phrase comprises the following steps:

- allocating the recognized words to part-of-speech categories (Col. 17, lines 53-67 and Col. 34, lines 34-51, and also Fig. 8);

- allocating the part-of-speech categories to nominal phrases and verbal phrases (Col. 34, lines 34-51, also Fig. 8); and

- combining the nominal phrases and verbal phrases according to syntactic rules into objects, providing various sentence models, the recognized word sequences being compared with predetermined sentence models, and, in the case of an agreement, a sentence being considered as recognized (Col. 24, line 56 to Col. 25, line 47, specifically Col. 25, lines 24-47, which describe the process of comparing the sequence with the sentence models. Also Col. 34, lines 34-57, and Col. 7, line 29 to Col. 8, line 3, specifically in Col. 7 from line 61 to Col. 8, line 1, wherein the sentence model is represented by the noun phrases (NP) of the stored questions.).

However, Bennett does not specifically mention

- analyzing a spoken phrase for triphones contained therein; and
  - forming words, contained in the spoken phrase, from the recognized triphones with the aid of dictionaries.

Conversely, Young teaches

- analyzing a spoken phrase for triphones contained therein (Young's Col. 10, lines 23-44, wherein command may include words, phrases, or sentences (Col. 8, line 67));

- forming words, contained in the spoken phrase, from the recognized triphones with the aid of dictionaries (Young's Col. 10, lines 23-44, wherein command may include words, phrases, or sentences (Col. 8, line 67)).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the feature of analyzing a spoken phrase for triphones and forming words from the recognized triphones as taught by Young for Bennett's method because Young provides techniques for creating and using fragmented word models to increase effective size of an active vocabulary of a speech recognition system, wherein the active vocabulary represents all words and word fragments that the speech recognition system is able to recognize, and wherein each word may be represented by a combination of acoustic models. As such, the active vocabulary represents the combinations of acoustic models that the speech recognition system may compare to a user's speech to identify acoustic models that best match the user's speech.

As per claim 2, Bennett, in view of Young, teach the method as claimed in claim 1, characterized in that a recognized sentence triggers an action in a voice-controlled application (Bennett's Col. 22, lines 2-5).

As per claim 3, Bennett, in view of Young, teach the method as claimed in claim 1, characterized in that each sentence model has a number of variables allocated to part-of-speech categories which are filled with the corresponding part-of-speech categories of the recognized words (Bennett's Col. 33, lines 30-44 and Col. 34, lines 34-49, wherein the "noun phrases" represent sentence models).

As per claim 4, Bennett, in view of Young, teach the method as claimed in claim 1, characterized in that the words to be recognized are held available subdivided into various part-of-speech categories in the dictionaries (Bennett's Col. 34, lines 34-49 and Col. 35, lines 7-13).

As per claim 5, Bennett, in view of Young, teach the method as claimed in claim 1, characterized in that the objects or parts thereof are linked to corresponding action parameters of a voice-controlled application (Bennett's Col. 22, lines 2-5, and Col. 7, line 59 to Col. 8, line 7).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tran (US Patent 6,070,140) provides a speech recognizer that analyzes input speech by using triphones (trigrams, Col. 24, lines 14-33) and grammars (Col. 26, lines, 14-50).

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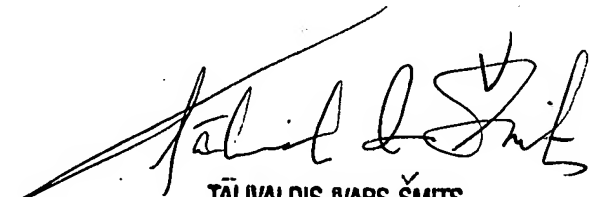
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie Lennox whose telephone number is (571) 270-1649. The examiner can normally be reached on Monday to Friday 9:30 am - 7 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NL

10/11/2007



TĀLVALDIS IVARS ŠMITS  
PRIMARY EXAMINER